

**REMARKS**

**I. Status of the Claims**

Claims 1-3 and 9-26 are pending.

Claims 1-3 and 9-26 stand rejected.

**II. Claim rejections under 35 U.S.C. 103**

Claims 1-3 and 9-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III US 6,395,861 in view of Blank et al (USPN 5,965,686). The office is correct that Kennedy discloses the use of a polyurethane coating, but not with zirconium as a catalyst. The examiner is wrong regarding the teaching of Kennedy regarding to the pot life on (Col. 1, lines 40-45) wherein the long pot life was the prior art method and was in combination with a 6-8 hour cure time and not with the use of a blend of catalysts.

Blank et al (USPN 5,965,686) discloses the use of zirconium catalysts for curing urethanes, but teaches away from the use of tin catalysts as inferior and detrimental to drying performance and thus is an improper reference.

The obviousness rejection of claims 1-3 and 9-26 is traversed. The Applicants present arguments as to the insufficiencies present in the cited obviousness combination.

The combination of the Kennedy '861 patent with the Blank '686 patent references does not teach the alleged

combination of at least one tin catalyst combined with at least one zirconium catalyst. The Blank et al. '686 patent teaches the use of a zirconium metal catalyst combined with a hafnium metal catalyst, but clearly teaches away from the combination with any tin based catalyst, which it describes as deficient in all properties. One skilled in the art would not be motivated to combine the zirconium catalyst of Blank '686 with the tin catalysts of Kennedy '861 which teaches the use of a combination of tin based compounds.

Whether or not disclosures in two or more prior art references are properly combinable depends, generally, on whether there is some teaching, suggestion or motivation in those references or elsewhere in the prior art to suggest the desirability of making the combination. The mere fact that it is possible to find isolated disclosures having some individual features that might be combined in a manner that would result in the claimed invention is not enough. There must be something in the prior art itself that suggests the desirability of the claimed combination. It is improper to pick and choose among the individual parts of various prior art references as a mosaic to recreate a facsimile of the claimed invention using the inventors' disclosure as an instruction book or blue print on how to reconstruct the prior art. To do so is impermissible

hindsight reasoning. Additionally, the problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in that manner to solve a particular problem. See *In Re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002) and *In Re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

The Blank et al. '686 patent teaches the combination of two specific metal catalysts, zirconium and hafnium, but specifically rejects the use of a tin catalysts, either singly or in combination with a second metal catalyst because of its deficiencies. Tin catalysts in the '686 patent are taught as being inferior in both its performance properties and toxicity levels. (see presented below: Column 6, line 50 to column 7, line 7)

The catalyst of this invention also preferentially catalyze the isocyanate-hydroxy reaction over the isocyanate-water reaction. **Organo tin does not exhibit this preferential catalysis**, and also catalyze the isocyanate-water reaction, **which leads to the formation of carbon dioxide and gassing**. For example, to prepare a polyurethane coating with exclusive carbamate linkages, a coating formulation containing HDI based aliphatic isocyanate and a polyurethane diol with beta-carbamate was formulated. When the metal complex of the present invention was used as the catalysts, a hard glossy film was obtained. **Whereas, with dibutyltin dilaurate as the catalyst, a hazy film was obtained**. This is due to the competing reaction of isocyanate with moisture in the

air.

**Furthermore, it is known that commercial organotin urethane catalysts will affect the durability of the final product. This is due to the catalytic effect of organotin catalysts on the degradation of the polymer product.** The metal complexes of the present invention shows less of a catalytic effect on the degradation of the polymer than the tin urethane catalysts. For a solution with polyester resin, water and catalysts, the degradation rate of polyester with the catalyst of this invention is 5 times slower than a typical tin catalyst.  
(emphasis added)

Thus one skilled in the art of golf ball coating would not be motivated to combine what is described as an inferior tin catalyst in the '686 patent with either zirconium or any other metal catalyst to improve drying.

It is improper, with regard to claims 1-3 and 9-26 to use the '686 patent to teach the combination of a tin catalyst with a zirconium catalyst because the '686 patent specifically teaches away from using tin as a catalyst, either alone, or in combination with another metal catalyst.

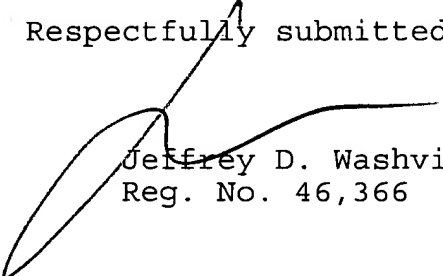
Kennedy does not teach or suggest the combination of tin with a zirconium catalyst. Without the improper use of the Blank '686 the remaining cited combination fails to teach the limitations of claims 1-3 and 9-26. Applicants respectfully request reconsideration and removal of the obviousness rejection.

### III. Conclusion

Applicants respectfully request reconsideration and removal of all rejections to claims 1-3 and 9-26, which are clearly patentable as amended over the cited prior art combinations.

Please feel free to call collect with any questions regarding this submission or any matters relating to this application.

Respectfully submitted,



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